

REMARKS

Claim Disposition

Claims 1 – 33 are pending in the application. Claims 1, 2, 5, 7, 10, 11, 12, 20, 23, 24, 27, 29 and 33 have been rejected. Claims 3, 4, 6, 8, 9, 13-19, 21, 22, and 28 have been objected to. Applicants also direct the Examiner's attention to note that Claim 7 is indicated as being allowable as well as being rejected. Therefore Claim 7 is presumed allowable unless indicated otherwise by the Examiner.

Allowable Subject Matter

Claims 3, 4, 6, 7, 8, 9, 13, 14, 15, 16, 17, 18, 19, 21, 22, 25, 26, 28, 30, 31, and 32 have been objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The Examiner states:

“The following is a statement of reasons for the indication of allowable subject matter: The prior art does not disclose a filter on the signal indicative of input device torque; a condition processing block to determine straight travel; an enable switch for receiving a binary control signal from said enable block; monitoring a vehicle ignition signal; and a memory switch for receiving its own output signal at its primary input.”

Applicants appreciate the Examiner's indication of the allowability of Claims 3, 4, 6, 7, 8, 9, 13, 14, 15, 16, 17, 18, 19, 21, 22, 25, 26, 28, 30, 31, and 32.

Claim Rejections – 35 U.S.C. § 102

Claims 1, 2, 5, 7, 10, 11, 12, 20, 23, 24, 27, 29, and 33 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,528,497 to Yamamoto et al., hereinafter referred to as Yamamoto. Applicants respectfully traverse. The Examiner states:

"As per claims 1, 2, 7, 10, 11, 12, 20, 23, 24, 29, and 33 Yamamoto et al. disclose a torque assist function responsive to a signal indicative of an input device torque for providing a torque-assist command to an electric motor on lines 40-42, on column 2; and a steering pull compensator responsive to a signal indicative of a valid detection cycle for modifying said torque assist command to the electric motor by an offset corresponding to a detected steering-pull condition on line 45-57, on column 2, and lines 35-45, on column 8; at least one summing function in signal communication with said torque-assist function and with said steering-pull compensator for summing the provided torque-assist command with the offset corresponding to a detected input device pull condition on lines 37-39, on column 5; a function block for preventing an offset correction corresponding to a detected steering pull condition from exceeding a desired value on lines 37-40, on column 5; it is inherent that there is a memory switch configured such that an output signal there from is also received as an input at an input terminal. The invention is microprocessor based and must be some program memory that would have an output going somewhere."

"As per claims 5, 27, Yamamoto et al. disclose an enable block for validating the detected steering pull condition on lines 35-45, on column 8."

Applicants respectfully contend that Yamamoto does not anticipate Applicant's claims. To anticipate a claim under 35 U.S.C. §102, a single source must contain all of the elements of the claim. Lewmar Marine Inc. v. Barient, Inc., 827 F.2d 744, 747, 3 U.S.P.Q.2d 1766, 1768 (Fed. Cir. 1987), cert. denied, 484 U.S. 1007 (1988). Moreover, the single source must disclose all of the claimed elements "arranged as in the claim." Structural Rubber Prods. Co. v. Park Rubber Co., 749 F.2d 707, 716, 223 U.S.P.Q. 1264, 1271 (Fed. Cir. 1984). Missing elements may not be supplied by the knowledge of one skilled in the art or the disclosure of another reference. Titanium Metals Corp. v. Banner, 778 F.2d 775, 780, 227 U.S.P.Q. 773, 777 (Fed. Cir. 1985)."

As to Claims 1, 2, 7? (also allowable), 10, 11, 12, 20, 23, 24, 29, and 33 Applicants respectfully contend that Yamamoto does not teach or disclose each element of the invention "arranged as in the claim". Specifically, with respect to Claims 1, 12, 20, 23, and 29, Yamamoto does not teach or disclose, "a steering-pull compensator responsive to a signal indicative of a valid detection cycle for modifying said torque-assist command to the electric motor by an offset corresponding to a detected steering-pull

condition.” Yamamoto is drawn to a steering stabilization system. Yamamoto does not teach or disclose a controller with a steering-pull compensator as claimed. In fact, there is no steering pull compensation in the torque assist and stabilization function taught by Yamamoto. Yamamoto is merely directed to steering compensation based on lateral dynamics of the vehicle e.g., lateral acceleration or yaw rate. Yamamoto does not address the same matters as Applicants invention, namely compensating for an off center pull or torque bias in the steering system. Applicants direct the Examiner’s attention to note that while similar terminology is employed, Yamamoto and the claimed invention are directed to significantly different matters. Yamamoto does not disclose or teach an element of the invention, therefore, it cannot anticipate the Applicants’ claims. Thus, Claims 1, 12, 20, 23, and 29 are allowable, the rejections are improper, and they should be withdrawn.

In addition, Yamamoto does not teach or disclose, “a steering-pull compensator responsive to a signal indicative of a valid detection cycle ...”. There is no teaching in Yamamoto as to a valid/invalid detection cycle, nor a signal indicative thereof. Applicants respectfully submit that the Examiner has mischaracterized the teachings of Yamamoto in this regard. To support the rejection, the Examiner refers to col. 2, lines 45 – 57. However, Yamamoto at col. 2, lines 45 – 57 does not teach a detection cycle but rather a description of the steering system therein and how the torques are combined:

“...steering torque input means; powered steering control means for applying a first actuating torque to steerable wheels of a vehicle according to a steering torque applied to the steering torque input means; means for detecting a lateral dynamic condition of the vehicle; and active reaction generating means for applying a second actuating torque to the steerable wheels so as to control a turning movement of the vehicle according to a signal supplied from the detecting means; whereby an overall actuating torque applied to the steerable wheels comprises a sum of the first and second actuating torques provided by the powered steering control means and the active reaction generating means. The lateral dynamic condition may include such parameters as the yaw rate and the lateral acceleration of the vehicle and their time derivatives.”

There is no teaching that this system includes a detection cycle. There is no teaching of the definition of a valid detection cycle, or what it would pertain to as the Applicants have disclosed and claimed. The detection cycle is clearly taught in the specification as being a time duration relative to ignition. Nothing disclosed in Yamamoto

can be considered equivalent to evaluation of a detection cycle to determine its validity as taught in the specification and claimed. Therefore, because Yamamoto does not disclose or teach an element of the invention, it cannot anticipate the Applicants' claims. Thus, Claims 1, 12, 20, 23, and 29 are allowable, the rejections are improper, and they should be withdrawn.

With respect to Claims 5 and 27, once again, these claims include the limitations distinguished above for Claims 1, 12, 20, 23, and 29, thus, they cannot be anticipated by Yamamoto. Moreover, contrary to the Examiner's suggestion, there is no disclosure of, "said steering-pull compensator comprising: **an enable block for validating the detected steering-pull condition.**" Applicants respectfully submit that the Examiner has mischaracterized the teaching of Yamamoto. To support the rejection, the Examiner relies on the disclosure of Yamamoto at Col. 8, lines 35 – 45. However, the sections relied upon disclose teachings with respect to deviation from an intended straight path, measurement of a yaw rate error, and corrections to the vehicle path based on the yaw rate error. There is no teaching what so ever regarding an enable block for validating the detected steering-pull condition as disclosed and claimed by the Applicants. Yamamoto does not disclose or teach an element of the invention, therefore, it cannot anticipate the Applicants' claims. Thus, Claims 5 and 27 are allowable, the rejections are improper, and they should be withdrawn.

With respect to Claims 2, 7?, 10, 11, 24, 27, and 33, Applicants respectfully contend that these claims include the limitations distinguished above for Claims 1, 12, 20, 23, and 29 thus, they cannot be anticipated by Yamamoto. Thus, Claims 2, 7?, 10, 11, 24, 27, and 33 are allowable, the rejections are improper, and they should be withdrawn.

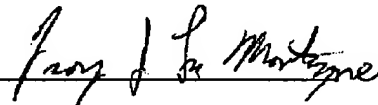
It is believed that the foregoing remarks are fully responsive to the Office Action and that the claims herein should be allowable to the Applicants. Accordingly, reconsideration and withdrawal of the rejections are requested.

In the event the Examiner has any queries regarding the instantly submitted response, the undersigned respectfully requests the courtesy of a telephone conference to discuss any matters in need of attention.

If there are additional charges with respect to this matter or otherwise, please charge them to Deposit Account No. 06-1130.

Respectfully Submitted,

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By 

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